AQS Enhanced Precision Reports - Software Release Notes for December 12, 2011

AQS Users who load and retrieve precision data may have noticed some recent changes.

AQS no longer generates the precision data transactions when a user loads raw data; instead, precision data for collocated monitors will be created on demand as needed for a report.

- 255 Data Quality Indicator Report, 246 Precision Report, and 250 P/A Raw Data Report precision data is generated via a custom database view
- o 502 Extract P/A Data only shows precision data from user loaded RP data

1. AQS is no longer generating precision data transactions during the load process.

Previous practice was that users loading raw data (RD) transactions automatically had the corresponding precision data (RP) transactions inserted. The POST process was actually generating these records and inserting those records into the PRECISION_DATA table, but this often encountered errors and caused the POST process to fail.

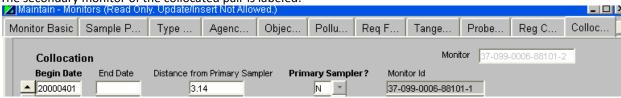
2. Precision data will be created on demand as needed.

Beginning In July 2011, precision data is created "on-the-fly" for collocated monitors as needed for a report. A custom database view automatically generates the precision data, and the view looks at both collocated precision data generated from RD transactions and precision data generated from RP transactions. As before, precision data can still be loaded by a user via the RP transactions.

3. Precision data is automatically generated for collocated monitors.

In order to have AQS automatically generate precision data, you must create a Monitor Collocation record (Maintain Monitor \rightarrow Collocation tab) which defines the collocated pair. Once this is done, AQS will automatically generate the precision data for these collocated monitors using the submitted raw data for the same date-time and precision id.

The primary monitor of the collocated pair is labeled: _ 🗆 × 🔀 Maintain - Monitors (Read Only, Update/Insert Not Allowed.) Pollu.. Req F... Tange... Monitor Basic | Sample P... Type ... Agenc... Objec... Reg C... Monitor Collocation Begin Date Distance from Primary Sampler **Primary Sampler?** Monitor Id 20000401 The secondary monitor of the collocated pair is labeled:



The distance from the primary sampler is in meters.

4. The changes affect the following AQS reports: the <u>255 Data Quality Indicator Report</u>, the <u>246 Precision Report</u> and the <u>250 P/A Raw Data Report</u>

Again, whenever one of these reports is run, the custom database view automatically generates the precision data to populate the report. The new precision data view looks at both collocated precision data generated from RD transactions and precision data generated from RP transactions.

Beginning on December 1, 2011, both user-submitted precision data and all automatically generated precision data are available in these AQS precision data reports: 255 Data Quality Indicator Report, 246 Precision Report, and 250 P/A Raw Data Report.

255 Data Quality Indicator Report – Since July 2011, this report already includes <u>both</u> submitted precision data and automatically-generated precision data. The 255 does not break data out into generated vs nongenerated precision data, but uses both in its calculations without making a distinction.

Collocation Summary

Pollutant: PM2.5			PC	QAO: DO	(Eastern B	and Of Chero	okee Indians of	North Carolin	a)				App A?:	Yes
				#	Collocated	# Actually	% Req. Sites			# Valid	%			
Year	Method	Region	State	# Sites	Required	Collocated	Collocated	# Req	# Obs	Obs	Complete	CV		
2010	118	04	NC	1	1	$\begin{pmatrix} 1 \end{pmatrix}$	100	30	47	47	100	7.06		
2010	SUMMARY	04	NC				100			47	100	7.06		
SUMMA	RY	04	NC				100			47	100	7.06		

For the 255 report, the "# Collocation Required" and the "# Actually Collocated" show compliance with Appendix A requirements for the number of collocated monitors in the network. This report already used the collocated precision view. The "# Actually Collocated" would reflect collocated monitors, set up as described earlier under 3.

246 Precision Report - displays precision data submitted using the RP (Precision Data) transaction and the automatically generated precision data; the report has a column labeled "GENERATED" that will distinguish these: submitted precision data would have "GENERATED" = "N" and the automatically generated precision data would have "GENERATED" = "Y"



250 P/A Raw Data Report –shows all precision data with a "GENERATED" flag to indicate the source of the data; submitted precision data would have "GENERATED" = "N" and the automatically generated precision data would have "GENERATED" = "Y"



5. The 502 Extract P/A Data has not been modified.

This report's purpose is to extract data in RP transaction format from the precision data table (PRECISION_DATA), which is populated via the load of precision data (RP). This is the data that users have submitted through the RP (precision data) transactions. It is not appropriate to show the system—generated precision data.